Division 3. Air Resources Board

Chapter 9. Off-Road Vehicles and Engines Pollution Control Devices

Article 1. Small Off-Road Engines

§ 2409. Emission Reduction Credits -- Production Credit Program for New Engines.

- (a) Applicability. The 1998 model year and later small off-road engines subject to the provisions of this article are eligible to participate in the production emission credit program described in this section for HC +NOx (or NMHC+NOx, as applicable) and Particulate Matter emissions.
 - (b) General provisions.
- (1) The production credit program for eligible small off-road engines is described in this section. Participation in this program is voluntary.
- (2) Any 2000 model year or later engine family subject to the provisions of this article is eligible to participate in the production credit program described in this section. Any 1998 or 1999 model year engine family subject to the provisions of this article is eligible to participate in the production emissions credit program described in this section provided it conforms with the requirements of section 2403.
- (3) Credits generated and used in the certification averaging, banking, and trading program pursuant to the provisions of section 2408 may not be used in the production credit program.
- (4) An engine family with a compliance level, as determined by production line testing pursuant to section 2407, below the applicable FEL to which the engine family is certified may generate emission credits for averaging, banking, or trading in the production credit program.
- (5) Positive credits generated in a given model year may be used in that model year and/or in any subsequent model year.
 - (c) Averaging.
- (1) A manufacturer may use averaging across engine families to demonstrate a zero or positive credit balance for a model year. Positive credits to be used in averaging may be obtained from credits generated by another engine family of the same model year, credits banked in previous model years, or credits obtained through trading.
 - (2) Credits used to demonstrate a zero or positive credit balance must be used at a rate of 1.1 grams to 1 gram.
 - (d) Banking.
- (1) A manufacturer of an engine family with a production compliance level below the FEL to which the engine family is certified for a given model year may bank positive production credits for that model year for use in certification averaging, trading, or, at the Executive Officer's discretion, to remedy noncompliance of another engine family.
- (2) Unless otherwise approved by the Executive Officer, a manufacturer that generates positive production credits must wait 30 days after it has both completed production testing for the model year for which the credits were generated and submitted the report required by paragraph (g)(1) before it may bank credits for use in future averaging or trading. During the 30 day period, the Executive Officer will work with the manufacturer to correct any error in calculating banked credits, if necessary.
 - (e) Trading.
- (1) An engine manufacturer may exchange positive production emission credits with other engine manufacturers through trading.
- (2) Production credits for trading can be obtained from credits banked for model years prior to the model year of the engine family requiring production credits.
 - (3) Traded production credits can be used for certification averaging or banking.
- (4) Unless otherwise approved by the Executive Officer, a manufacturer that generates positive production credits must wait 30 days after it has both completed production testing for the model year for which the credits were generated and submitted the report required by paragraph (g)(1) before it may transfer credits to another manufacturer or broker.
- (5) In the event of a negative credit balance resulting from a transaction, both the buyer and the seller are liable, except in cases involving fraud. Engine families participating in a trade that leads to a negative credit balance may be subject to suspension or revocation of the Executive Order if the engine manufacturer having the negative credit balance is unable or unwilling to obtain sufficient credits in the time allowed.
- (f) Credit calculation. For each participating engine family, and for each regulated pollutant (HC+NOx (NMHC+NOx), CO and Particulate Matter) emission credits (positive or negative) are to be calculated according to the following equation and rounded to the nearest gram. Consistent units are to be used throughout the equation:

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Credits = (FEL - CL) x Sales x Power x EDP x Load Factor

Where:

FEL = The applicable Family Emission level to which the engine family was certified.

CL = compliance level of the deteriorated production line testing results for the subject pollutant in g/bhp-hr. Sales = sales or eligible sales as defined in section 2401.

Power = the sales weighted maximum modal power, in horsepower, as calculated from the applicable test procedure as described in Section 2403. This is determined by multiplying the maximum modal power of each configuration within the family by its eligible sales, summing across all configurations and dividing by the eligible sales of the entire family. Where testing is limited to certain configurations designated by the Executive Officer, the maximum modal power for the individual configuration(s) must be used. Manufacturers may use an alternative if approved by the Executive Officer.

EDP = the Emissions Durability Period for which the engine family was certified.

Load Factor = For Test Cycle A and Test Cycle B, the Load Factor = 47% (i.e., 0.47). For Test Cycle C, the Load Factor = 85% (i.e., 0.85). For approved alternate test procedures, the load factor must be calculated according to the Load Factor formula found in paragraph (f)(1) of Section 2408.

- (g) Maintenance of records.
- (1) Any manufacturer that is participating in the production credit program set forth in this section must establish, maintain, and retain the records required by paragraph (h) of Section 2408 with respect to its participation in the production credit program.
- (2) The Executive Officer may void ab initio an Executive Order for an engine family for which the manufacturer fails to retain the records required under this section or to provide such information to the Executive Officer upon request.
 - (h) Reporting requirements.
- (1) Any manufacturer who participates in the production credit program is required to submit a production credit report with the end of the model year production testing report required under Section 2407 within 90 days of the end of the production testing of a given model year's engine families. This report must show the calculation of credits from all the production testing conducted by the manufacturer for a given model year's engines. Such report must show the applications of credits, the trading of credits, the discounting of credits that are used and the final credit balance. The manufacturer may submit corrections to such end of model year reports in a final report for a period of up to 270 days after the end of the production testing of a given model year's engine families.
- (2) The calculation of eligible sales (as defined in section 2401) for end-of-year and final reports must be based on the location of the point of first retail sale (for example, retail customer or dealer) also called the final product purchase location. Upon advance written request, the Executive Officer will consider other methods to track engines for credit calculation purposes, such as shipments to distributors of products intended for sale in California, that provide high levels of confidence that eligible sales are accurately counted.
- (3) Reports must be submitted to: Chief, Mobile Source Operations Division, Air Resources Board, 9528 Telstar, El Monte, CA 91731.
- (4) A manufacturer that fails to submit a timely end of year report as required in paragraph (h)(1) of this section will be considered ineligible to have participated in the production credit program.
- (5) If the Executive Officer or the manufacturer determines that a reporting error occurred on an end of model year report previously submitted under this section, or an engine family production testing report submitted under section 2407, the manufacturer's credits and credit calculations will be recalculated. Erroneous positive credits will be void. Erroneous negative credits may be adjusted by the Executive Officer. An update of previously submitted "point of first retail sale" information is not considered an error and no increase in the number of credits will be allowed unless an actual error occurred in the calculation of credits due to an error in the "point of first retail sale" information from the time of the original end of model year report.

NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43102 and 43104, Health and Safety Code. Reference: Sections 43013, 43017, 43018, 43101, 43102, 43104, 43150-43154, 43205.5 and 43210-43212, Health and Safety Code.